DOCUMENT RESUME

ED 095 782 HE 005 856

AUTHOR Peck, Robert D.; Lincicum, Michael S.
TITLE Long-Range Enrollment Trends for Post Secondary Education in Oregon.
INSTITUTION Educational Coordinating Council, Salem, Oreg.
PUB DATE Mar 74
NOTE 23p.

EDRS PRICE MF-$0.75 HC-$1.50 PLUS POSTAGE
DESCRIPTORS *Decision Making; *Educational Finance; *Enrollment Projections; Governance; *Higher Education; Public Policy; *Statewide Planning; Students
IDENTIFIERS *Oregon

ABSTRACT

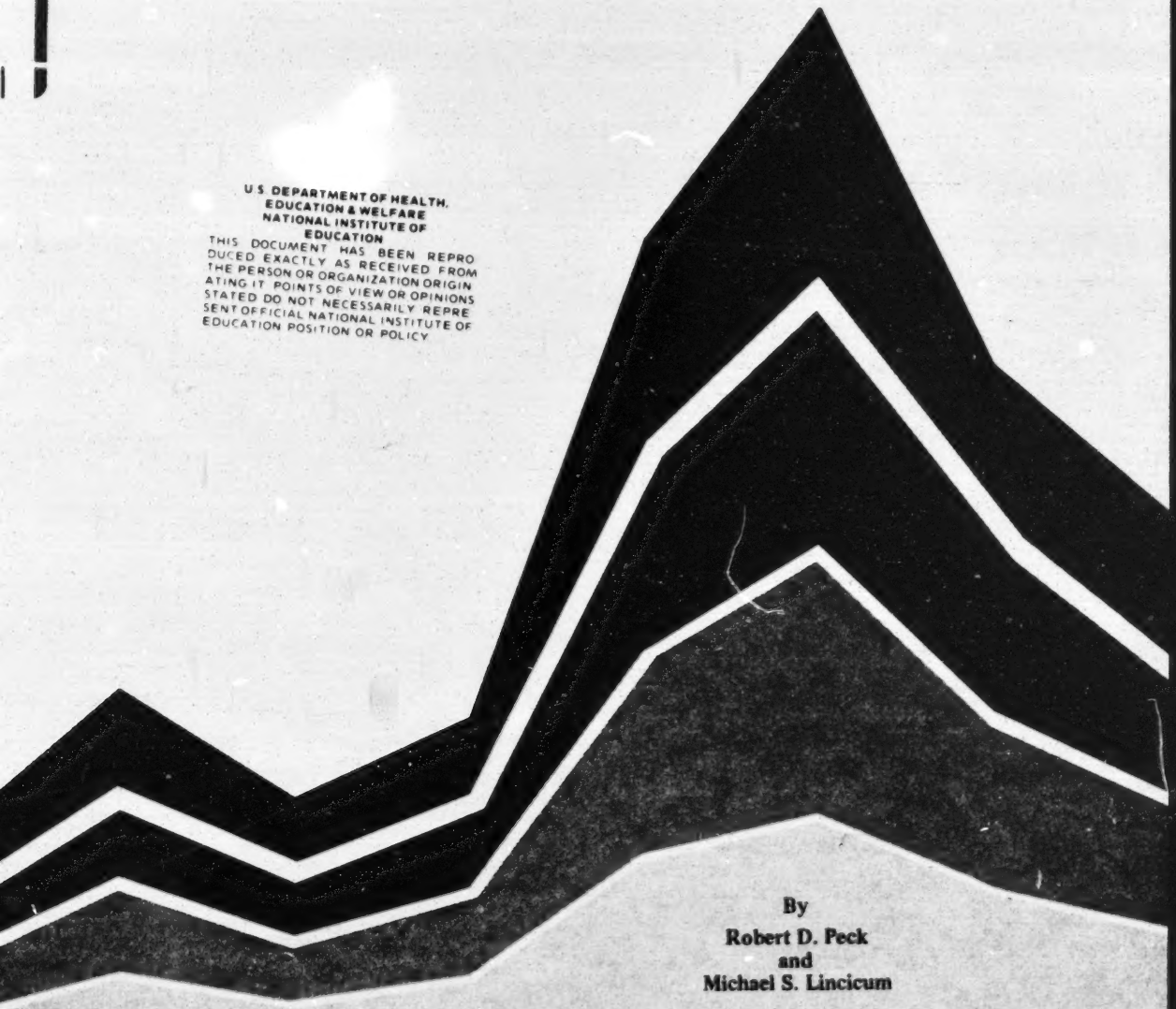
There is a great deal of discussion and concern within the postsecondary education community regarding the future of postsecondary enrollments. The Council staff has followed this debate and has identified critical population factors that will influence future enrollments in Oregon institutions. In light of this, the Council has presented population trends that influence postsecondary enrollments to 1984. Considering these projections, several policy questions arise concerning facilities, staffing, students, and finances, all of which are discussed separately in this document. This review of potential problems facing postsecondary education in Oregon during the next decade makes it apparent that many critical decisions will be faced by educational policymakers at all levels during this period. The decisions that will be faced both during the growth of the late 70s and the decline of the 80s in some segments will test the ability of Oregon's system of educational governance. This system, which is based largely upon voluntary cooperation, planning, and coordination, may not be able to respond to the unprecedented changes that appear to be facing postsecondary education. Critical decisions regarding funding, student allocation, staffing, and facilities utilization, particularly during the post-1980 contraction, will require much greater coordination and planning than has been necessary during the extended period of sustained growth of the 1960s and 1970s. (Author/PG)

ED 095782

BEST COPY AVAILABLE

Long-Range Enrollment Trends for Postsecondary Education in Oregon

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY



By
Robert D. Peck
and
Michael S. Lincicum

COUNCIL MEMBERS

Mr. Lloyd Anderson, Chairman
Mr. Donald Bassist
Mrs. John C. Cotton
Mr. C. Girard Davidson
Senator Edward N. Fadeley
Dr. Leland Hess
Mr. Harry Jacoby
Mr. Charles Jordan
Dr. R. E. Lieuallen
Mr. Robert Oliver
Dr. Dale Parnell
Representative Larry Perry
Mr. Robert Swan
Rev. Paul E. Waldschmidt

Mr. George L. Mitton, Acting Director

LONG-RANGE ENROLLMENT TRENDS FOR POST SECONDARY EDUCATION IN OREGON

by
Robert D. Peck
and
Michael S. Lincicum

MARCH 1974

Educational Coordinating Council
4263 Commercial Street S.E.
Salem, Oregon 97310

TABLE OF CONTENTS

	Page
LIST OF FIGURES	iii
CHAPTER I POPULATION AND ENROLLMENT TRENDS	1
Population Trends Which Influence Postsecondary Enrollments	1
Other Factors Influencing Postsecondary Enrollments	6
Projected Enrollments	7
CHAPTER II POLICY ANALYSES	13
Introduction	13
Facilities	14
Staffing	14
Students	15
Finances	16
Conclusion	17

LIST OF FIGURES

Figure		Page
1	United States, Persons 18-21 Years	2
2	Actual and Projected 18-24-Year-Olds, Oregon, 1950-1990	2
3	Actual and Projected Oregon High School Graduates, 1968-1985	3
4	United States Live Births and Rate per 1,000 Population, 1920-1970	4
5	United States Live Births and Rate per 1,000 Population, 1970-1972	4
6	United States Drop in Live Births, 1970-1972	5
7	Birth, Death and Natural Increase Rates, Oregon, 1940-1972	5
8	Population, Resident Births with Rates, Oregon, 1930-1972	6
9	Oregon High School Seniors Attending School, 1961-1973	7
10	Projection Assumptions	8
11	Projected Headcount Enrollment, State System of Higher Education Institutions, 1973-1984	9
12	Projected Headcount Enrollment, Oregon Independent Institutions, 1973-1984	9
13	Projected Headcount Enrollment, Oregon Community Colleges, 1973-1984	10
14	Actual and Projected Headcount Enrollment in Oregon Institutions, 1960-1984	11

CHAPTER I

POPULATION AND ENROLLMENT TRENDS

There is a great deal of discussion and concern within the postsecondary education community regarding the future of postsecondary enrollments. The growth of post high school education in Oregon and throughout the nation during the last 20 years has been phenomenal. The last five years have seen this growth in enrollment level off in many institutions, and some types of schools have seen drops in enrollment. There is considerable disagreement among educators regarding the future of postsecondary education. Some experts at the national level are predicting significant declines in enrollments as well as major changes in the structure of postsecondary education. Other observers predict new and continued growth during the next few years.

The Council staff has followed this debate and has identified critical population factors which will influence future enrollments in Oregon institutions. The Council conducts annual surveys of high school seniors and high school graduates, and the data obtained from these studies provides information about student attitudes which might affect future postsecondary enrollments. This report, based upon data from the United States Census, the Oregon State Health Division, and the State Department of Education as well as data maintained by the Educational Coordinating Council, examines factors which will influence enrollment trends in Oregon through the year 1985.

Populations Trends Which Influence Postsecondary Enrollment

It is obvious that enrollments in postsecondary educational institutions are directly related to the number of persons available in the population who are interested in pursuing education beyond the high school. Traditionally, postsecondary enrollments have been predominantly composed of persons between the ages of 18 and 21 years. Thus, the number of persons in this age group can be used as a basic indicator for the number of persons who will be available to enroll in postsecondary educational programs.

Figure 1 shows that nationally the 18- to 21-year old age group grew dramatically, beginning in the mid-50's and that this growth is projected to continue until about 1980. Beginning in 1980, however, a sharp decline in the number of college age individuals in the United States is projected. It is important to note that these projections are based upon persons already "born," and any changes which might result will be minor.

Oregon's population patterns are very similar to the national picture. Population estimates of 18- to 24-year old persons, based upon 1970 census data for Oregon are shown in Figure 2. Note that the number of persons in this age group reaches a peak in 1980, and by 1990, the number of college age persons will have dropped to below the 1970 level. These projections are based upon the actual number of persons in Oregon in 1970, and the only thing which might cause a significant increase in these figures would be greatly increased migration of families with school age children into Oregon between 1970 and 1990.

Another indicator of potential postsecondary educational enrollment which is closely related to the population factors already mentioned is the number of high school graduates each year. This indicator is used by both the Council staff and the State Department of Higher Education in making long-range enrollment projections for Oregon's institutions (see Figure 3). Since the annual number of high school graduates is directly related to the population of 17- and 18-year olds in Oregon, the pattern here is almost identical to the one shown for the 18- to 24-year old population. The relationship between the leveling off of college enrollments that has occurred since 1972 and the number of high school graduates in the last two years is apparent. Notice that the number of high school graduates will remain fairly stable through 1976 with only minor fluctuations. Beginning in 1977, however, substantial increases in the number of high school graduates are projected through 1979. After 1979, a steady drop in the pool of high school graduates is projected through at least 1985.

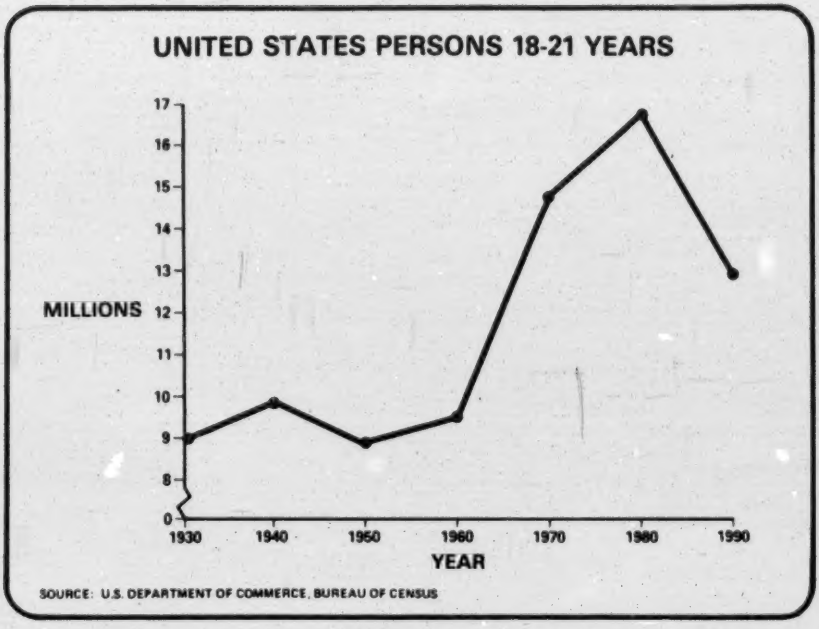


Figure 1

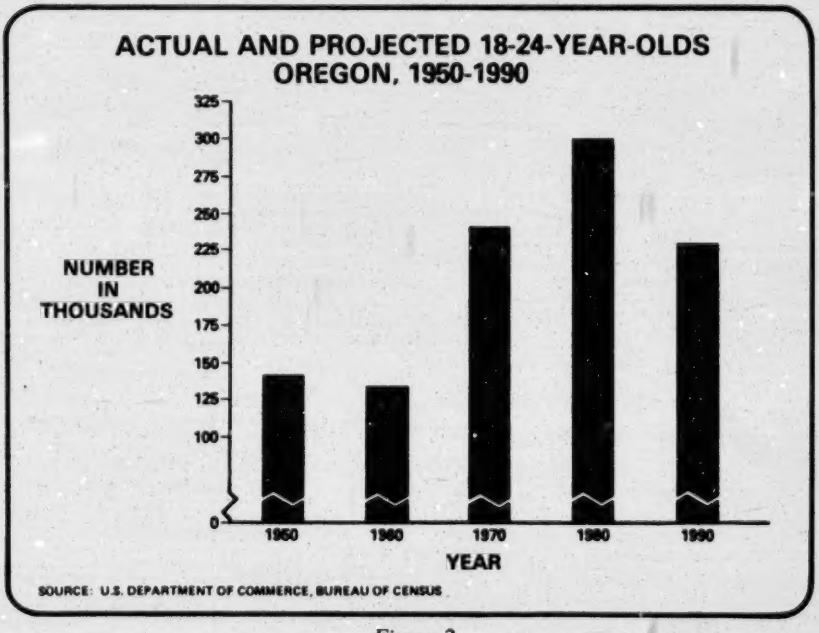


Figure 2

These projections, developed annually by the State Department of Education and the State Department of Higher Education, are based upon the actual number of students already enrolled in the lower grades and, like the population estimates, they are not likely to change significantly unless

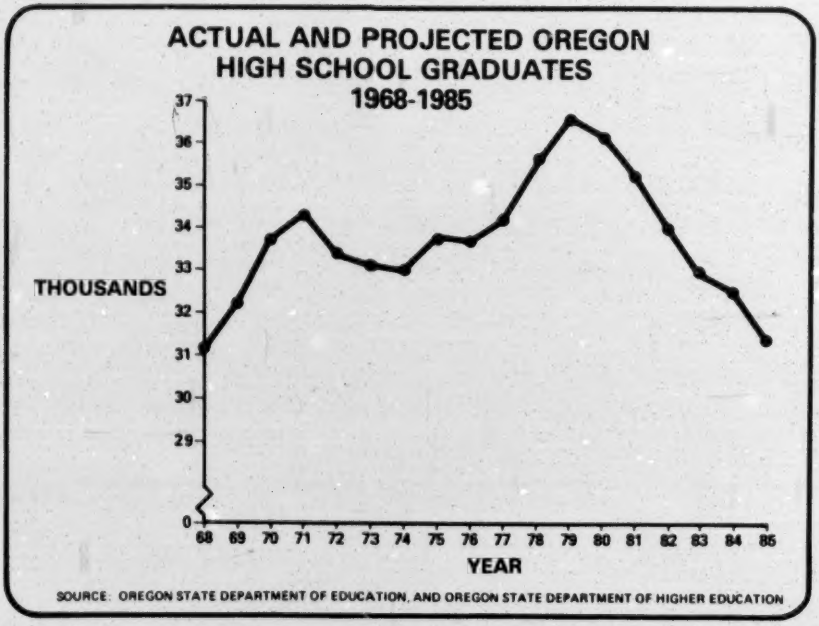


Figure 3

Oregon experiences a significant change in the present in-migration patterns. Recent population projections developed by the Center for Population Research at Portland State University indicate that much of the growth in Oregon's population is due to migration into the State. The growth due to in-migration is distributed fairly evenly among all age groups, however, and the current rate of growth due to in-migration is not great enough to significantly change the general trends indicated above.

All of the population projections shown so far have been based upon persons already born–projections which are not subject to significant change. In order to predict the size of the pool of potential postsecondary students for longer range periods, it is necessary to examine trends in birth rates. Since the newborn children of one year will not reach college age until 17 years later, the current birth rates, both nationally and in Oregon, provide some basis for projecting postsecondary enrollments in the 1990's. Figure 4 shows that nationally the birth rate in 1970 of 18.2 per thousand is lower than in any other period since 1920, and the actual number of live births in 1970 was well below the 1960 level.

Figure 5 shows that during the three-year period beginning in 1970, the birth rate dropped over two percentage points, and the actual number of live births dropped by approximately 250,000 per year. A regional breakdown shows that the Pacific states experienced one of the sharpest drops in the birth rate from 1970 to 1972 (see Figure 6).

Data shown in Figure 7 supplied by the Oregon State Health Division shows that births in Oregon are following the national trends. It can be seen that the birth rate in Oregon has been on the decline except for two short periods since about 1952. The sharp decline which occurred nationally, beginning in 1970, also occurred in Oregon.

Figure 8 gives detailed figures on live births in Oregon showing that Oregon's birth rate declined over 15 percent during that three-year period and the actual number of live births declined by over 4,000 per year from 1970 to 1972. The number of live births in 1972 was lower than it has been in Oregon since 1946, and the 1972 level of 31,308 births is significantly below the peak year of 1953 when 39,866 new Oregonians were born. It is interesting to note that children born in 1953 reached the age of 18 in 1971, a year when postsecondary enrollments in Oregon were also at a peak.

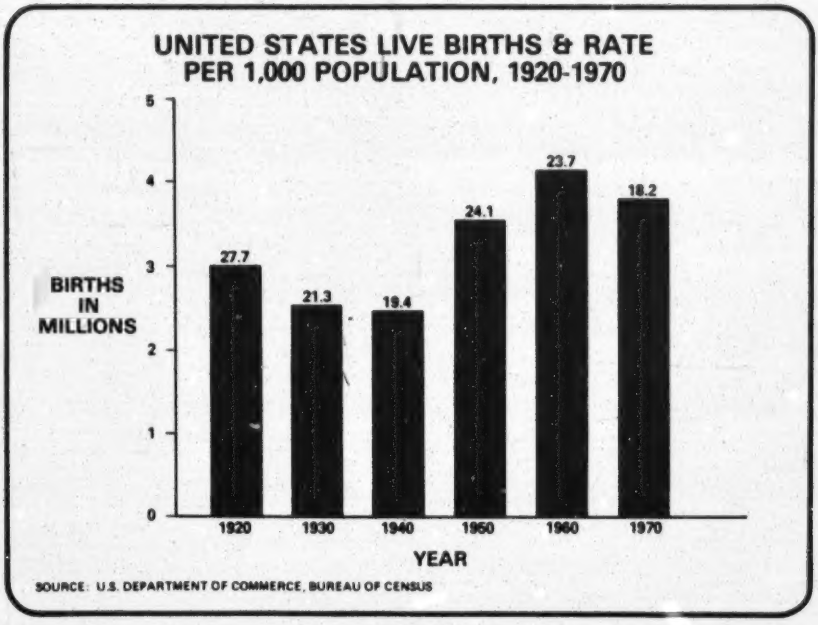


Figure 4

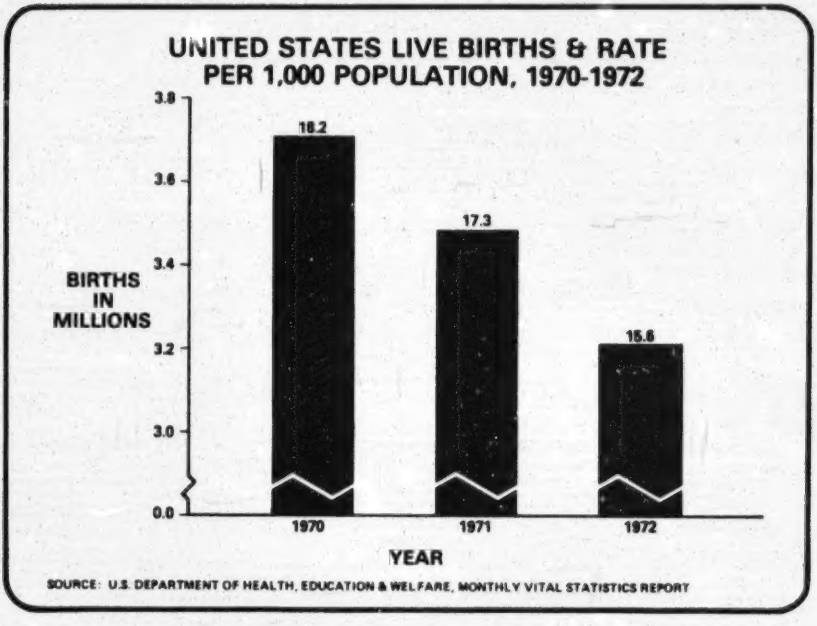


Figure 5

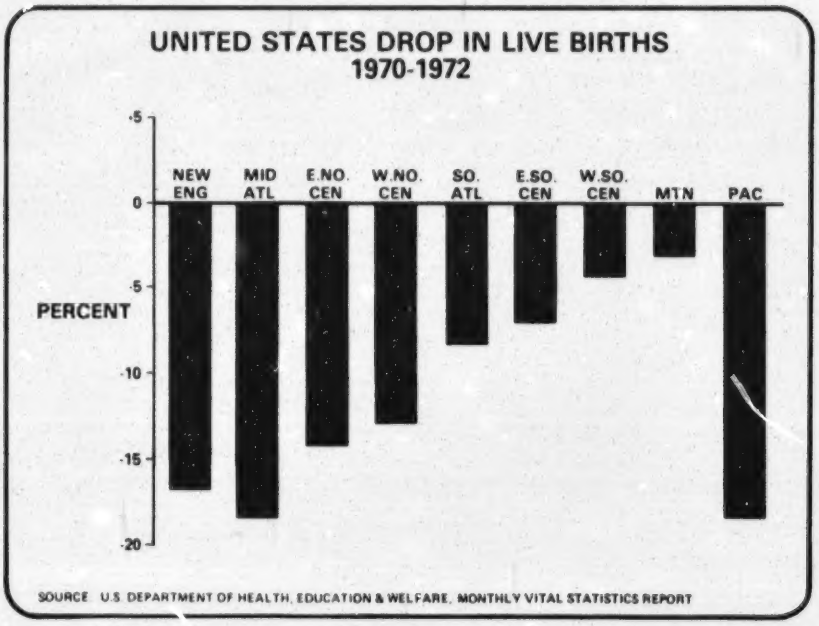


Figure 6

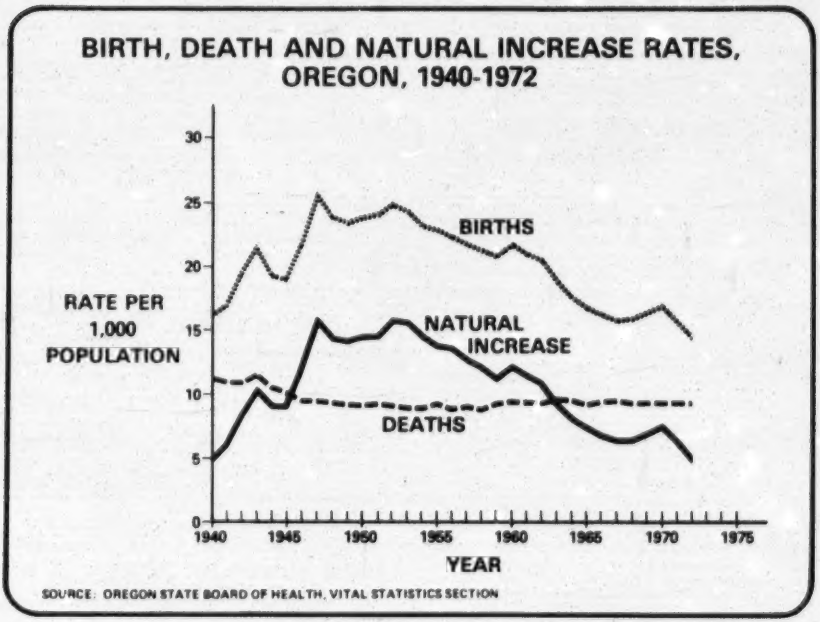


Figure 7

All of the above data on birth rates and population growth seem to indicate that the drop in the number of college age youth and high school graduates projected to begin in 1980 will probably continue well beyond 1990. Current economic and social trends certainly do not seem to indicate that the downward trend in the birth rate is likely to change in the next few years.

POPULATION, RESIDENT BIRTHS WITH RATES, OREGON, 1930-1972

YEAR	POPULATION	BIRTHS	
		NUMBER	RATE
1930	953,786*	13,473	14.1
1931	967,200	13,227	13.7
1932	980,600	12,845	13.1
1933	994,000	12,228	12.3
1934	1,007,400	13,071	13.0
1935	1,020,800	13,143	12.9
1936	1,034,100	14,119	13.7
1937	1,047,500	15,495	14.8
1938	1,061,000	16,333	15.4
1939	1,074,000	16,727	15.6
1940	1,089,684*	17,522	16.0
1941	1,107,000	18,784	17.0
1942	1,148,500	22,283	19.4
1943	1,167,200	25,380	21.7
1944	1,221,000	23,444	19.2
1945	1,227,200	23,339	19.0
1946	1,347,900	29,566	21.9
1947	1,423,300	36,190	25.4
1948	1,470,800	34,937	23.8
1949	1,511,200	35,062	23.2
1950	1,521,341*	35,991	23.7
1951	1,568,000	37,317	23.8
1952	1,602,100	39,753	24.8
1953	1,636,800	39,948	24.4
1954	1,662,680	38,560	23.2
1955	1,690,840	38,478	22.9
1956	1,734,850	38,423	22.2
1957	1,737,470	37,828	21.8
1958	1,728,550	36,295	21.0
1959	1,777,000	36,534	20.6
1960	1,768,687*	38,347	21.7
1961	1,816,345	37,475	20.6
1962	1,825,138	36,983	20.3
1963	1,856,190	34,863	18.8
1964	1,906,000	33,500	17.6
1965	1,972,150	32,965	16.7
1966	1,999,780	32,446	16.2
1967	2,006,360	31,446	15.7
1968	2,050,900	32,136	15.7
1969	2,081,640	33,834	16.3
1970	2,091,385*	35,353	16.9
1971	2,143,010	33,344	15.6
1972	2,183,270	31,308	14.3

*U.S. Census figures. All others are estimates.

SOURCE: OREGON STATE BOARD OF HEALTH, VITAL STATISTICS SECTION

Figure 8

Other Factors Influencing Postsecondary Enrollments

While the size of the pool of traditional college age youth is an extremely important factor in determining future postsecondary enrollments, there are other factors which also must be considered in attempting to predict future enrollments.

One of the most important of these factors is the number of persons in the 18- to 24-year old age group who actually enroll in postsecondary educational programs in any given year. Since 1956, the Office of High School Relations of the State Department of Higher Education has conducted an annual survey of high school seniors to determine their activity plans after leaving high school. This survey provides a good indicator of the number of high school graduates each year who plan to pursue post high school education over a relatively long period.

It can be seen in Figure 9 that while there has been some slight change in the percentage of Oregon high school graduates desiring to continue their education each year, this percentage has remained fairly constant at between 60 to 65 percent since about 1964. Follow-up surveys of Oregon high school graduates also have been conducted by the Office of High School Relations and the Educational Coordinating Council, and these studies also show a fairly stable trend for about the last ten years. The percentage of high school seniors attending some type of postsecondary institution has remained between 50 to 60 percent for about ten years.

The above data would seem to indicate that the growth in postsecondary enrollments during the last 13 years was largely due to the increase in the size of the pool of college age youth rather than to increasing numbers of this group attending school each year. This is particularly true of the four-year institutions since the student bodies in these institutions have been predominantly composed of 18- to 24-year olds throughout this period. In 1972, 83 percent of the students in Oregon's private four-year institutions were under 25 years of age and 68 percent of the students in public four-year institutions were under 25. Only 9 percent of the students in the public four-year institutions were over the age of 30, and this included students enrolled in graduate and professional schools.

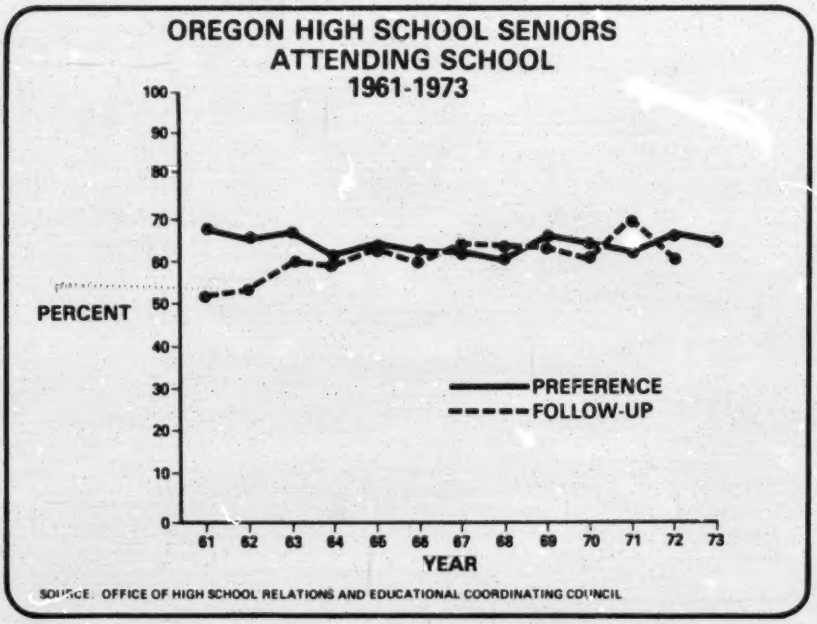


Figure 9

The age distribution of students in Oregon community colleges is somewhat different than in the four-year institutions, but even in these schools a significant portion of the total enrollment has been composed of traditional college age youth. Since many adults are involved in only part-time or hobby-related programs in the community colleges, the percentage of the full-time equivalent enrollment accounted for by traditional college age youth is probably higher than for total headcount enrollment. Part of the growth in community college enrollments has been due to the entrance of persons beyond traditional college age into the postsecondary educational system, while much of the rapid growth in community college enrollments has also been due to the growth of the 18- to 24-year old population during the last decade.

One significant trend has emerged from the Post High School Plans Survey over the last three years which may have a significant influence on the distribution of students among Oregon's institutions. Every year since 1971 the number of students indicating plans to combine work and school has increased while the percentage of students planning to attend school exclusively has declined. Analysis of the surveys shows that the students who plan to combine work and school are much more likely to attend community colleges than those students who plan to attend school as their sole activity. If this trend continues, it could mean that a greater proportion of future high school graduating classes will attend community colleges, and thus shift enrollments away from the four-year institutions. This trend might be compensated for by increased transfers from community colleges to four-year schools, but the surveys also show that the students planning to combine work and school are somewhat more likely to enroll in vocational programs which tend to be two-year terminal programs.

Projected Enrollments

It is apparent that the projected changes in the number of college age youth over the next ten years are going to affect enrollments in Oregon's four-year institutions and community colleges differently to the extent that this traditional age group accounts for the enrollment in each type of

institution. Since the vast majority of students in both the public and private four-year institutions are drawn from this traditional pool of 18- to 24-year olds, the projected enrollments in these institutions tend to follow the trends in population of this age group quite closely.

These projections are based upon a number of assumptions, however, and if the basis for any of these assumptions changes, so will the enrollment projections (see Figure 10).

It is also important to note that these projections are based on segment-wide assumptions. Future enrollment patterns in individual institutions will be influenced by many factors which do not have a significant impact on segment-wide or state-wide trends. Such factors would include the development of new programs or the phasing out of existing programs on individual campuses, financial conditions affecting individual institutions, or regional differences in population growth or decline.

PROJECTION ASSUMPTIONS

1. **THE AGE DISTRIBUTION OF STUDENTS WITHIN THE STATE SYSTEM WILL REMAIN STABLE.**
2. **THE STATE SYSTEM WILL CONTINUE TO ENROLL THE SAME PROPORTION OF HIGH SCHOOL GRADUATES EACH YEAR AS THEY DID IN 1973.**
3. **THE PROPORTION OF OUT-OF-STATE STUDENTS ATTENDING THE STATE SYSTEM WILL REMAIN STABLE.**
4. **RETENTION RATES WILL REMAIN CONSTANT.**
5. **STUDENTS WILL NOT BE PREVENTED FROM ATTENDING STATE SYSTEM INSTITUTIONS BECAUSE OF ENROLLMENT LIMITATIONS.**

Figure 10

Projections of headcount enrollment in the State System of Higher Education through the 1984-85 academic year shown in Figure 11 reflect the anticipated "bulge" in the pool of high school graduates which will occur in the later 1970's and early 1980's.

Projected enrollments in Oregon's independent colleges and universities shown in Figure 12, also reflect this "bulge," but to a lesser extent than in the public institutions. This is due to the fact that several of these institutions have established enrollment ceilings, and these ceilings will limit the peak enrollment level which will be achieved in the early 1980's.

These projections are based upon the same basic assumptions as those used for the State System except for the compensation which had to be made due to the existence of enrollment limitations in some institutions.

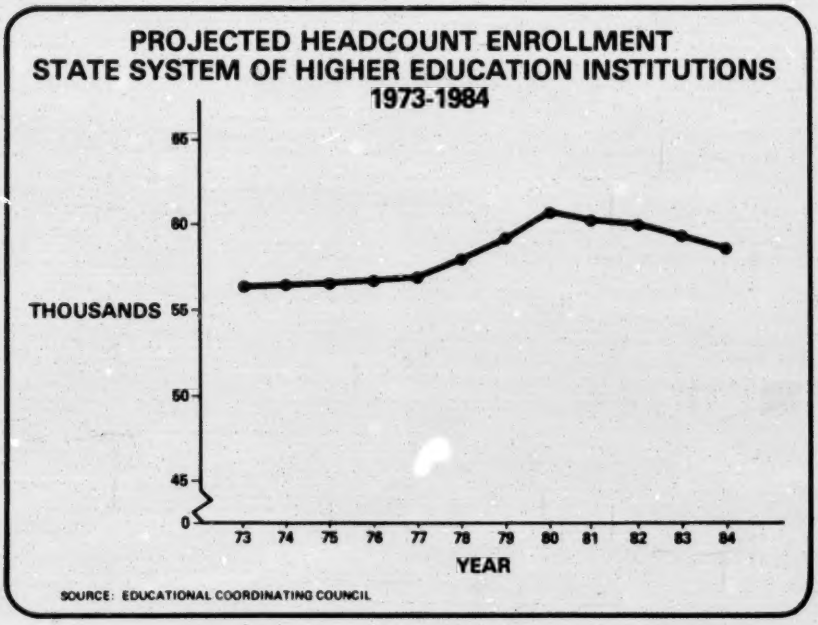


Figure 11

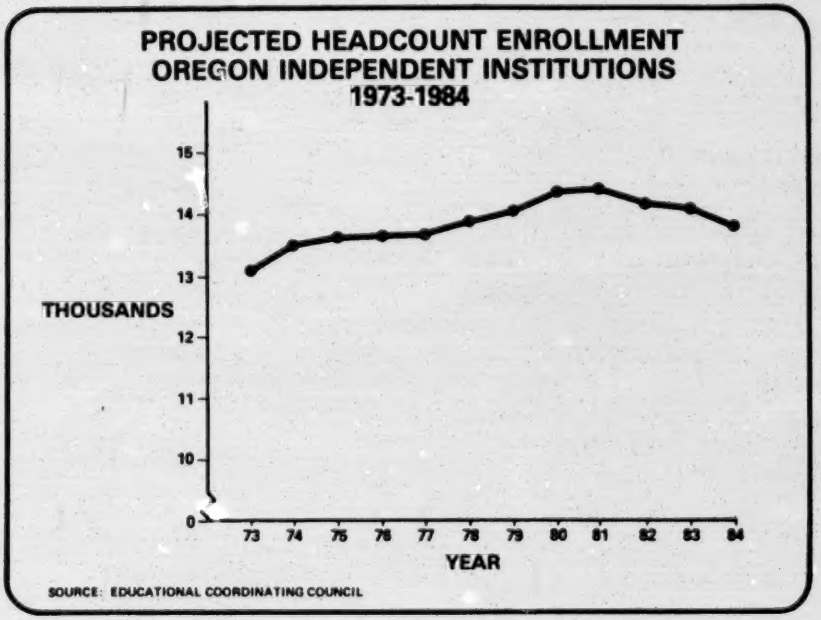


Figure 12

Projections of community college enrollments based upon these same basic assumptions show a pattern of continued growth through 1980 with a leveling off of enrollments by 1983 (see Figure 13) Projected enrollments in the community colleges do not show a continuing decrease after 1980 as do enrollments in the four-year institutions because of the different age distribution of students in community colleges. The total adult population of Oregon is projected to increase after 1980 even though the number of college age persons will decline beginning in that year. This continued population growth will result in continued growth in the adult enrollment in community colleges even given the assumption that the community colleges will continue to enroll the same proportion of their local communities as they did in 1973. In the event that this assumption is not valid, and the schools continue to attract an even greater proportion of the adults in their local communities, the enrollment of Oregon's community colleges will continue to increase significantly after 1980, even though the pool of traditional college age students will be decreasing during this period.

Current enrollment projections for the community colleges which have been approved by the State Department of Education and the Educational Coordinating Council do include an assumption of increasing growth in the number of adults in community college programs each year. This projected growth in enrollments due to increased numbers of nontraditional students is extremely difficult to project accurately. There is very little historical data upon which to base projections of students other than those in the traditional 18- to 21-year-old age group, and adult enrollment is also much more subject to fluctuation as a result of economic conditions and unpredictable factors such as the gasoline shortage.

Even given the inherent problems in making community college enrollment projections, however, it seems apparent that the decrease in the number of college age youth after 1980 will affect those community college programs which draw a significant portion of their enrollment from this traditional pool of students.

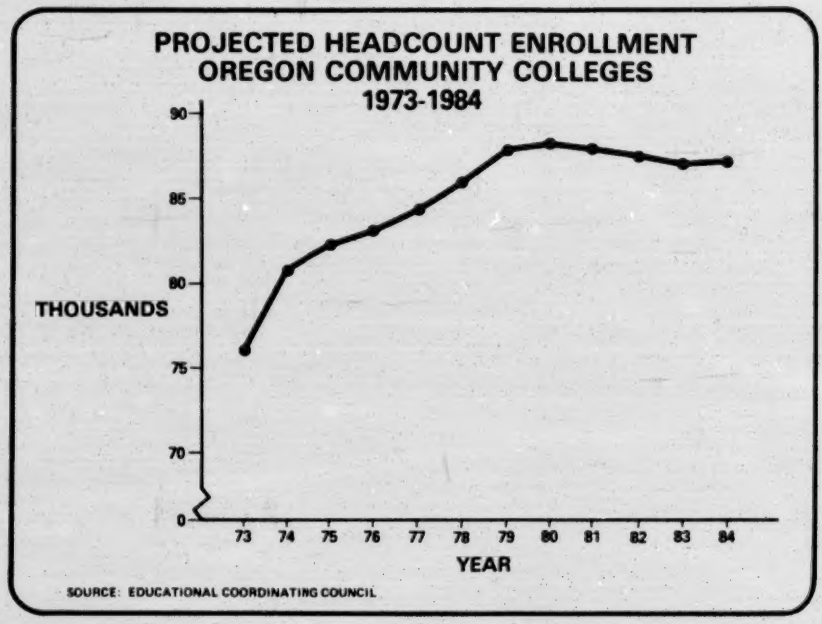


Figure 13

These long-range enrollment projections indicate that the period of rapid growth in postsecondary enrollments has ended, and if these projections are reasonably accurate, postsecondary enrollments will be at a fairly constant level through 1985, with a "bulge" occurring from about 1977 through 1985. This fact is particularly important when these projections are compared with enrollment trends during the last decade as shown in Figure 14.

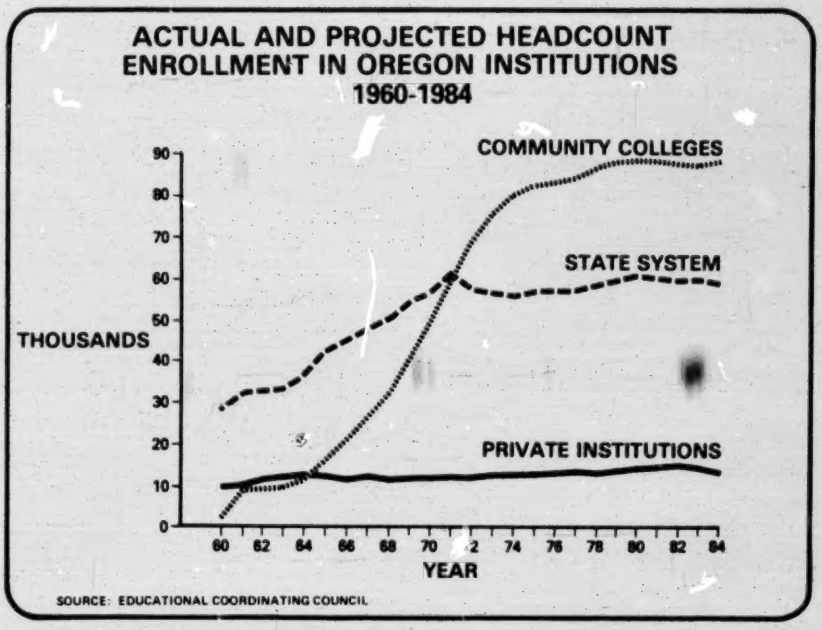


Figure 14

Actual and projected enrollments over a 25-year period show this leveling quite vividly. If the steady drop in enrollments predicted to begin in 1980 continues into the 1990's as the data on birth rates seems to suggest, postsecondary institutions will be faced with many problems. The administrative and programmatic adjustments which will have to be made in shifting from a period of rapid expansion to a period of gradual contraction will require careful planning at the state, segmental, and institutional levels. The anticipated "bulge" in enrollments projected for the 1977-1985 period will complicate this planning to a considerable extent.

CHAPTER II

POLICY ANALYSIS

Introduction

In the light of these projections, several policy questions arise. Before addressing those which apply most directly to institutions, some comments should be made regarding the general ability of the State to deal with some of the problems of the future. Oregon exhibited uncommon facility in working through the challenges of expansion during the 60's. The same professional approach must now be made to a new kind of difficulty.

In the first instance, it is quite apparent that there are few technical planning tools available to the Boards which can be used to deal with declining enrollments in a rational manner. In the absence of good and workable methods, present practices are all too often based on expediency and justified by temporary economic conditions. But these will not do when more permanent reductions are required. It is not merely that selective reductions in both programs and staff present sensitive political and personnel problems. More seriously, there are no planning systems and no information systems in existence designed expressly to assist in this kind of decision making. The Resource Requirements Prediction Model is a valuable asset to administrators but it becomes usable in the decremental planning process only in conjunction with policy decisions made by other procedures for which we are inadequately prepared.

In the second place, all information seems to indicate that more and more persons outside the traditional college age group of 18 to 21 will be seeking education of one sort or another. Oregon has no consistent and articulated policy in this connection. Several groups, organizations, and institutions have engaged in providing what has traditionally been called "adult and continuing" educational services. Depending on the organization or program, public support has been variously granted or denied. The patchwork pattern of programs is paralleled by an equally confusing array of policies.

Finally, both the decline in general enrollments and shifting patterns promise to increase inter- and intra-segmental desires to maintain student bodies to the maximum institutional advantage. Already, recruitment competition is mounting. Though there are some who argue that such competition can only enhance the quality of programs under the pressure of a free and open market, there is little evidence that this is happening or even that institutions, if they wished, could respond in a "market place" manner. However, even if it were possible, it is still obvious that the statewide planning being done to deal with this problem by the Oregon High School College Relations Council needs all the support it can get while Boards and institutions need to review their policies in this connection.

As our preliminary display of population and enrollment patterns shows, however, the problems for the educational community in the next decade are complicated and made unique by the "1980 bulge" – a temporary surge in the traditional student population beginning in 1977 and falling off after 1980. The above issues dealt most directly with general decline and shifting patterns. Another peculiar set of problems is created by the "1980 bulge" for which new policies are required. Ordinarily, changes in enrollments and shifts in patterns are reviewed as a normal part of budgeting, getting no unusual treatment. The prospects for the immediate future are unusual, however, and hence call for new analytical attention.

Though significant changes in enrollment affect all parts of the educational enterprise, particular attention should be given to policies touching upon facilities, staffing, students, and finance. These will be discussed below in order.

At the outset, however, it should be noted that the various segments of the educational community will be affected differently. For instance, community colleges having the smallest percentage of students in the 18 to 21 age group will realize a more modest surge prior to 1980, and in all likelihood, will continue to grow but at a slower rate after that time. The pattern will not be the same at four-year institutions. However, the competition for students in all age groups by all institutions will be much greater, thus creating a new set of interinstitutional problems. In discussing each topic, segmental differences will be kept in the forefront.

Facilities

Differences in the ten-year enrollment projections are most marked when comparing community colleges with public four-year institutions. In both, there is to be a new upward trend beginning in 1977 and reaching its peak in 1980. Growth in community college enrollments then is expected to level off while four-year enrollments will begin a slow but steady decline. At least three major issues are raised by this projection.

First, how shall we provide facilities for the new surge? Approximately 11,000 new students will be in the system by 1980 -4,500 in four-year schools and 6,500 in community colleges. Though this amounts to only about a 10 percent increase, it will put some strain on facilities presently available. For community colleges, the growth will stay in the system with relative permanency. However, for the four-year institutions, this growth will not hold. Therefore, different capital construction policies are required for these two public segments.

Second, special attention needs to be given to the four-year policies since it is in this segment that the most significant decline is expected after 1980. From the point of view of facilities alone, there appears to be no need for, and in fact, many reasons to resist any expansion of assignable space which is linked to enrollments. Ways should be found to maximize and cooperatively utilize facilities throughout the entire educational system, both public and private.

This brings up the third issue related to facilities. The program adequacy of facilities needs to be examined carefully, paying attention not only to the facilities themselves, but to their location. In the context of present projections, such an examination ought to be undertaken with the changing characteristics of the clientele clearly in mind. The needs of a broader, nontraditional student clientele ought not to be forgotten in this planning.

Staffing

It is apparent that the differences between community colleges and four-year institutions raise different staffing problems. In the case of community colleges, the "surge" of the late 70's and the shifting patterns of student clientele define these problems. It is hard to know whether there will be difficulties in finding sufficient numbers of new instructors for the community college "surge." Present prospects appear to be good, however. It may be more difficult to provide adequate qualified staff for the more diverse expectations of the changing clientele. In order to maintain quality in our community colleges, it is imperative that special attention be given to these problems.

When looking at the four-year institutions in anticipation of the projected enrollment patterns, an entirely different set of issues appears. In the first instance, the "surge" of the late 70's is a short preface to a protracted period of reductions. Many institutions may find the "surge" a welcome relief from present restrictions provided adequate funds are available to accommodate the new students. Unless special policies are prepared, however, the contraction of the 80's could prove quite disruptive.

The paucity of administrative and planning tools designed for rational contraction already has been pointed out. There is also a deficiency of policy not out of design or oversight but plainly because the situation is unprecedented. It is clear that the quality of institutions cannot be sustained if reductions in budgets are made across the board. It is also clear that the diversity of programs and institutions cannot be maintained without clear and deliberate decisions.

How can institutions of higher education cope with the "surge" of the late 70's without becoming unduly encumbered by tenured faculty in the 80's? At the present time, 64 percent of the eligible ranks of faculty in State System schools are tenured. The median age of the group is 47 years. By 1985, ±500 of this group will have reached retirement age. If restraint is practiced in the granting of tenure during the period of the "bulge," State System institutions will be in a much better position to deal with further contraction in the 80's. One alternative for dealing with the "bulge" is to establish enrollment distribution mechanisms which will spread the increased number of students out among the institutions, both public and private. This can be done by putting ceilings on some institutions and providing various incentives for others. Such practices, though somewhat distasteful, would provide for a much better utilization of existing resources while at the same time avoiding most of the damaging consequences of the temporary "bulge."

Tenure is only one dimension of the issue, however, and probably not the most serious one at that. Even without the difficulties presented by tenure, how can colleges and universities reduce programs while still maintaining quality? Certainly some principles providing for allocation of programs among the various schools will help. Furthermore, it would be very helpful if basic information were readily available on faculty training, experience, expertise, and interest other than or in addition to that used for initial employment and the granting of tenure. This data would enable institutions to utilize more fully available faculty resources.

Some mention should be made here of collective bargaining by faculties. It is difficult to anticipate both the form and the impact of this activity. There is some reason to believe that the "surge" of enrollments will ease the pressure for collective bargaining altogether. In any regard, there is little doubt that one issue which will be hotly debated will be the conditions for the granting of tenure.

Students

The anticipated "bulge" in the postsecondary population cohort which is projected to occur between 1977 and 1985 could create a number of problems for potential students. The growth in enrollment which is anticipated will raise several critical issues for students which are distinctly different from the problems which may be faced by students during the long term period of declining college age population projected to begin in the early 1980's. Because of this difference, the two phases of the "bulge" as it affects students will be discussed separately.

The growth phase of the 1980's enrollment bulge may have the effect of limiting student choices and opportunities in several ways. First, the anticipated expansion may place some institutions in a position in which they must limit enrollments. Such limitations will have the effect of restricting student access to institutions which have recently maintained relatively open admissions policies. Some students may be required to attend institutions which are not their first choice, and it is critical that any limitations which become necessary are applied fairly and equitably to all.

Currently, there are established ceilings for enrollments in all public and most private four-year institutions, but present enrollments are well below these ceilings in almost all institutions. Both proprietary schools and community colleges presently maintain open admissions policies, and enrollment ceilings are established only in special programs requiring unique laboratory or clinical facilities. Since the current enrollment situation does not require that ceilings be enforced in most cases, consistent statewide policies for allocation of students above these ceilings have not been established. In specific programs where enrollments are limited, a number of methods have been employed, including waiting lists, special aptitude tests, and the establishment of admission standards based on previous academic achievement. Several other alternative methods may have to be employed to deal with this new situation.

A second problem raised by the growth phase of the enrollment bulge is in the area of student financial aid. The peak enrollments anticipated in 1979, 80, and 81 could severely strain the availability of student financial aid resources, thus limiting the ability of many low and moderate income students to pursue postsecondary education. Current State student financial aid programs,

which are largely grant programs, seem to be doing an effective job of opening access for all types of students when coordinated with Federal student assistance programs. If the peak enrollment period of the 80's is not accompanied by expanded Federal student assistance, however, the State may need to explore a number of alternative approaches to ensure that financial barriers do not limit access. A final problem may be a limitation of access to postsecondary education for nontraditional students. If institutions are faced with increasing enrollment of traditional students, placing a serious strain on their facilities and resources, the ability of these institutions to serve students having special needs and learning problems will be impaired. Should the State adopt policies to serve this broader student clientele, alternative strategies will have to be employed to ensure their access during the growth phase of the enrollment bulge.

The type of problems which may be encountered by students during the period of contraction will be quite different from those already described. One problem which might be faced is competitive recruitment by postsecondary institutions. If institutions are faced with a steady decrease in enrollments after 1980, it may be necessary to actively recruit students to a much greater extent than in the past. This intensified recruitment could place students in an extremely vulnerable position unless recruitment practices are controlled and "neutral" counseling services are provided.

Finances

The enrollment bulge beginning in 1977 accompanied by rapidly rising costs promises to impose severe strains upon Oregon's method of financing higher education. At present, both the State System of Higher Education schools and the community colleges receive state support through a formula based upon full-time equivalent (FTE) enrollments. Increases in enrollments, therefore, will necessitate annual increases in state support beginning in 1977 and lasting through 1980.

At this point, it is too early to anticipate the state of Oregon's economy in 1977 or the availability of revenues for higher education. However, even under the most optimistic assumptions it seems clear that funding capacity will be severely strained.

In the past, Oregon has followed a very simple strategy in funding education beyond the high school. As instructional costs have mounted, the State has increased the amount per FTE that it contributes while at the same time the level of student tuition has been increased by small annual increments. The result has been more money for higher education each year while the ratio of state support to tuition has remained relatively constant.

Assuming a strain in funding capacity to meet the enrollment bulge, only two major options appear to be available to state policy makers. Either more money must be made available to higher education at the expense of other services or the share of the total educational bill now covered by tuition must be increased. Both of these options are difficult and unpalatable. While the amount spent on higher education has increased steadily over the past ten years, the percentage of State General Fund expenditures committed to higher education has remained relatively constant at about 16 percent. To substantially increase the size of this share for education at the expense of other services would likely engender severe and obstinate opposition from the State agencies affected.

Likewise, disproportionate increases in tuition would be distasteful. The Board of Higher Education has expressed its reluctance to raise tuition on a number of occasions. While tuition has steadily increased over the years, the raises have occurred in small increments and only when all other sources of funds were exhausted. We may anticipate more increases in the future, but strong and vocal opposition from students may be anticipated if major tuition increases are promoted as a method of dealing with sharply rising costs.

Attention should also be directed to the relationship between the pricing of education through tuition and fees and the general public welfare. There is little public understanding of the way in which educational opportunities and benefits reflect social values and how the costs of education

put these values into practice. A good deal more effort needs to be given to involving ordinary citizens in gaining an understanding of the social effects of the financing of education.

Major financing problems of a different nature may be anticipated when enrollments start to decline. Beginning about 1980, the number of students will decline rather rapidly to pre-1968 levels. This will throw the FTE funding formula into reverse and may cause severe dislocation in institutions due to rapidly declining financial support.

The existing FTE formula has worked satisfactorily in the past, but our experience with it is confined to a period of increasing or near stable enrollments. It works well in a period of growth because institutional planners know that the following year's budget will equal the current year's plus an increment for additional students and program improvement. Hence, the institution is assured of a stable base budget and can plan appropriately for the future.

The FTE formula works in quite a different fashion when it is thrown into reverse. Under conditions of rapidly declining enrollments, great uncertainty is generated in the minds of institutional planners. Planners know that the following year's budget will be smaller than the current year, but they do not know how much smaller. This leads to crystal ball gazing in the form of an exaggerated dependence upon enrollment projections in an attempt to recapture a measure of stability. The problem is exacerbated by the fact that faculty require substantial notice before they can be separated from their respective institutions. This means that institutions must plan carefully for reductions in their programs and cannot readily respond to unanticipated changes in funding levels.

FTE funding has worked well under conditions of growth and probably can be made to work under conditions of decline. The problem is to lower the uncertainty that declining enrollments engender in order to regain stability in budgeting and budget planning. One attractive proposal to achieve this goal would be to retain the FTE formula, but lag the budget that results from a given FTE by one year. This would be accomplished by computing the following year's budget upon the actual fall term FTE of the current year.

In this manner, institutional planners would be able to compute their respective budgets one calendar year prior to its taking effect and could plan accordingly. This technique would allow the institution the lead time necessary to reduce faculty in an orderly manner and affect other necessary economies.

Conclusion

The preceding review of potential problems facing postsecondary education in Oregon during the next decade makes it apparent that many critical decisions will be faced by educational policy makers at all levels during this period. The decisions which will be faced both during the growth of the late 70's and the decline of the 80's in some segments will test the ability of Oregon's system of educational governance. This system, which is based largely upon voluntary cooperation, planning and coordination, may not be able to respond to the unprecedented changes which appear to be facing postsecondary education. Critical decisions regarding funding, student allocation, staffing, and facilities utilization particularly during the post-1980 contraction will require much greater coordination and planning than has been necessary during the extended period of sustained growth of the 1960's and 1970's.